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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,392	03/28/2001	Jeffrey R. Hirsch	0112300-642	3729

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EXAMINER

MOSSER, ROBERT E

ART UNIT PAPER NUMBER

3712

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/819,392

Applicant(s)

HIRSCH ET AL.

Examiner

Robert Mosser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26th, May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION



In response to the RCE entered May 26th, 2006.

This action is Final.

Claims 1-74 are pending.



Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 26th, 2006 has been entered.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 1-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrie USP 5,980,384 in view of Coelho et al USP 5,466,866.

[The section entitled "*Response to Arguments*" present below, is incorporated herein]

Regarding claim **1,12, 13, 25-27, 32, 33, 44, 53-57, 61-64, 66, and 70**, Barrie teaches a gaming apparatus and method in an electronic gaming machine for allowing a player to participate in a wagering game (abstract) through the deposit of monies or credits into an input device (Col 6:29-37), the electronic determination and display of a game including game outcome (Col 12:30-36), the display of a background in a static location (Figures 2-3, Elm 226, 214), and the outputting of monies or credits through an output mechanism (Col 13:37-45). In addition to the electronic display (512), Barrie further teaches the inclusion a memory device (516), a processor (514) for retrieving, generating, and displaying graphical images resultant of a game outcome (Figures 1,2,3,5 & Col 13:55-59) including a first and second graphical image (123, 113) wherein the motion of one of the first and second graphical image is altered with respect to the remaining graphical image to create an "apparent" movement (animation/ apparent movement) with respect to the remaining image in the rolling of displayed game symbols over a displayed background (Col 12:24-36).

Barrie however is silent regarding displaying less than all of said first or second graphical image with at least one dimension greater than at least one predetermined dimension of the display is partially displayed within the perimeter of the display frame at any one time. In a related game graphic processing system Coelho teaches the inclusion of the above feature commonly known in the art as "scrolling" (Figure 5 & Col 9:21-28). It would have been obvious to one of ordinary skill in the art at the time of

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invention to have incorporated the game graphics engine of Coelho in the game device Barrie in order to save the time and cost required to develop a unique graphics engine as taught by Coelho (Col 1:22-29).

Limitations directed to the retrieval or transfer of graphical data between memory locations and or display memory locations are implicit to the operation of a computing device as any computer game information (be it related to graphics or actual game function) must be stored on a computer accessible media in order said computer to access the information and resultant thereof produce a display depicting the state of the game as demonstrated in figures 1-2 of Coelho and 4-5 of Barrie.

Barrie teaches the utilization of a video display for the simulation of a traditional reel slot machine game including the animated spinning of the game reels (Col 3:53-62, 4:13-27, & 12:30-36) however is silent regarding the utilization of sprites to create the described animation. In the related invention however, Coelho teaches the use of sprites to provide an "illusion of motion" through sequentially displaying each of a series of bitmap pictures (Col 8:41-55, 6:51-54 & Figure 4) commonly referred to as animation. It would have been obvious to one of ordinary skill in the art at the time of invention to have utilized sprites as taught by Coelho as the animation means in the invention Barrie in order to employ a common animation technique or alternatively to allow the creation of visual animation without requiring a reloading of the entire display.

Regarding claim 2 in addition to the above stated, Coelho teaches the use of image buffers (Col 2:63-65).

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Regarding claims **3, 4, 23, 24, 49, 52, 60, 67, and 74** in addition to the above stated, Coelho teaches the use of screen depth or the Z-position in order to determine which image data is displayed for a particular location in the combination of over laying images (Figures 5, 8, & Col 6:14-50).

Regarding claims **5-8, 14-15, 18, 20, 22, 29-31, 34-36, 41, 50, 51, 58, 59, 65, 71, and 72**, in addition to the above stated, Coelho teaches the use of a XY coordinate system (Col 6:11-13), the variation of XY position with time (Col 2:38-50 & Col 9:21-28), animation or apparent movement (Figure 4, Col 10:12-21), and the determination of image velocity (Col 9:20-27 "*stationary*" "*scrolling*").

Regarding claims **9-10, 39, 46, 47, and 73**, in addition to the above stated, Coelho teaches the use of pixel data including the use of transparent pixels in sprites (Col 2:50-65 & Col 8:10-18).

Regarding claim **11**, in addition to the above stated, the examiner gives official notice that the detection of collisions between graphical objects such a ghost and Pac-Man (as discussed by Coelho) is extremely old and well known in the art of computer gaming for determining game outcome. Further as the applicant has not necessarily defined the collision as resultant of game play the collision is additionally interpreted as resultant of overlaying the first image onto a second image as shown in Figure 5 of Coelho ("sprite", "background"). Further details regarding the detection of the collision or overlap may be found in the rejection of at least claim 3 above.

Regarding claim **16**, in addition to the above stated, Coelho teaches the dimensions of the specified first or second graphical image is at least two times greater than one dimension of the display frame (Figure 5, "*background*", "*display screen*").

Regarding claims **17**, **19**, **21**, and **45**, in addition to the above stated, Coelho teaches the use of "tiles" to create a first or second graphical image consisting of a plurality of modular sections (Figure 6 & Col 10:5-21).

Regarding claim **28**, in addition to the above stated, Coelho teaches other bitmaps may be smaller than the background bitmap (Col 2:54-63) and hence that the background graphic is larger than all other graphical images as claimed.

Regarding claim **37**, in addition to the above stated, Coelho teaches a process of animation wherein the background is moved opposed to the generation of a plurality of frames (Col 9:20-27).

Regarding claims **38**, **40**, and **48**, in addition to the above stated, Coelho teaches a video buffer (Col 2:63-65) in addition to a display adapter for driving a display (Col 3:48-52). It would have been obvious to one of ordinary skill in the art at the time of invention to have included the buffer and display adapter of Coelho into the device of Barrie in order to insure compatibility between the game engine and the game hardware.

Regarding claims **42**, and **43**, in addition to the above stated, Coelho teaches a game wherein the player may control the movement of a character through a maze including the displaying of character movement (Col 2:38-65). As the player observes their avatar (Pac-Man) responding to their controlling actions they observe a change in

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their avatars position responsive to their control inputs and hence are able to evaluate a velocity of their avatar. It would have been obvious to one of ordinary skill in the art at the time of invention to have included the above feature into Barrie's game embodiment shown figures 2-3 of Barrie in order to allow the use of skill or perceived-skill based gaming in the invention of Barrie.

Regarding claims **68**, and **69**, in addition to the above stated, Coelho teaches that each object has size including a height and width (Col 6:10).

Response to Arguments

Applicant's arguments filed May 26th, 2006 have been fully considered but they are not persuasive.

The Applicant states "Applicant believes [the] Examiner has not established a case of a *prima facie* obviousness for among other reasons the Examiner has not provided any prior art citation that "suggests the desirability of the combination." MPEP 2143.01...", on page number 2 of their remarks submitted on May 26th, 2006.

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the examiner

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relies in the knowledge generally available to one of ordinary skill in the art to modify Barrie with the teaching from Coelho.

The Applicant's reliance on MPEP 2143.01 section III is presented in absence of the remainder of the of MPEP 2143 including MPEP 2143.01 Section I and further sections of the MPEP including MPEP 2144-2145 and MPEP 2144.07 contained therein which, would at the very least would be consider equally if not more pertinent to the specific issue raised by the Applicant. It is additionally noted that the second motivation now challenged by the Applicant and reading "It would have been obvious to one of ordinary skill in the art at the time of invention to have utilized sprites as taught by Coelho as the animation means in the invention Barrie in order to employ a common animation technique or alternatively to allow the creation of visual animation without requiring a reloading of the entire display." (emphasis added), is Applicant Admitted Prior Art. This feature is presented by the Applicant in the Background portion of their Specification and reading

"Furthermore, if the stars moved with respect to a black background image, each star would be a separate graphical image. A graphical image is commonly referred to as a "sprite."

Unlike frame-based animation which requires a computer system to generate numerous frames, a computer system only needs to generate one frame in cast-based animation. " (Background of the Instant Application page 7:19-8:1).

If one were to interpret the Applicant's arguments in light the specific combination of Sprite based animation to electronic gaming machine such as the electronic gaming machine of Barrie then the issue must additionally be considered as taught by the background of the instant Application as the preceding quotation provided above is

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prefaced by additional remarks in the Applicant's specification directing the later quotation to the field of computer animation on slot machines (Background of the Instant Application pages 2-3).

In accordance with MPEP 2129

"Where the specification identifies work done by another as "prior art," the subject matter so identified is treated as admitted prior art. In re Nomiya, 509 F.2d 566, 571, 184 USPQ 607, 611 (CCPA 1975) (holding applicant's labeling of two figures in the application drawings as "prior art" to be an admission that what was pictured was prior art relative to applicant's improvement).", the statement made by the Applicant in their Specification outlining the state of the art at the time of invention set forth the utilization of Sprites in connection with gaming devices and hence has established this argued element as Applicant Admitted Prior art.

In response to the Applicant's arguments that the combination of two or more references is "hindsight" because "express" motivation to combine the references is lacking (As presented on Page of the Remarks by Applicant filed May 26th, 2006), there is no requirement that an "express, written motivation to combine must appear in prior art references before a finding of obviousness." See Ruiz v. A.B. Chance Co., 357 F.3d 1270, 1276, 69 USPQ2d 1686,1690 (Fed. Cir. 2004). For example, motivation to combine prior art references may exist in the nature of the problem to be solved (Ruiz at 1276, 69 USPQ2d at 1690) or the knowledge of one of ordinary skill in the art (National Steel Car v. Canadian Pacific Railway Ltd., 357 F.3d 1319, 1338, 69 USPQ2d 1641, 1656 (Fed. Cir. 2004)).

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Examiner finds that the combined teachings of the references would have suggested the claimed arrangement to those of ordinary skill in the art at the time of invention and as such maintains the rejection.

Conclusion

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Mosser whose telephone number is (571)-272-4451. The examiner can normally be reached on 8:30-4:30 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on (571)272-7147. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

REM



MARK SAGER
PRIMARY EXAMINER